

## AGRICULTURAL CHEMICALS SUBCOMMITTEE MEETING RECORD

### TIME AND DATE:

10:00 AM, October 28, 2002

### LOCATION:

TCEQ, Park 35, Building F, Room 2210, Austin, Texas

### PURPOSE OF MEETING:

The FY03 First Quarter meeting of the Agricultural Chemicals Subcommittee of the Texas Groundwater Protection Committee.

### ATTENDEES:

#### AGENCIES

Texas Department of Agriculture [TDA]  
Texas Commission on Environmental Quality [TCEQ]  
Texas Water Development Board [TWDB]  
Texas Alliance of Groundwater Districts [TAGD]  
Texas Structural Pest Control Board [TSPCB]  
Texas State Soil & Water Conservation Board [TSSWCB]  
Texas Cooperative Extension [TCE]

#### REPRESENTATIVES

Steve Musick	Chair, Member, TCEQ, Austin
Ambrose Charles	Member, TDA, Austin
Janie Hopkins	Member, TWDB, Austin
Barry Miller	Member, TAGD, Gonzales
Michael Kelly	Member, TSPCB, Austin
Donna Long	Member, TSSWCB, Temple
Bruce Lesikar	Member, TCE, College Station

#### AGENCY STAFF

Jeanette O'Hare	TDA, Austin
Deborah Danford	TDA, Austin
Joe Peters	TCEQ, Austin
Alan Cherepon	TCEQ, Austin
Lynne Fahlquist	USGS, Austin

## INTERESTED PARTIES

Ed Baker  
Francie Baker

Syngenta Crop Protection, Mineola  
Mineola

### MEETING SUMMARY:

#### I. Opening Remarks

The Chairman of the Agricultural Chemicals Subcommittee, Mr. Steve Musick (TCEQ), called the meeting to order. He then welcomed everyone to the meeting, and asked the subcommittee members to introduce themselves. Members not in attendance were Dr. C. Allen Jones, TAES, Mr. Donnie Dippel, TDA, and Mr. Murray Walton, TSPCB. Dr. Bruce Lesikar, who represents TCE, for this meeting also stood in for Dr. C. Allen Jones, Dr. Ambrose Charles stood in for Mr. Donnie Dippel, and Mr. Michael Kelly stood in for Mr. Murray Walton. After these preliminaries, Mr. Musick proceeded to the Task Force Reports.

#### II Task Force Reports

**Site Selection Task Force:** The Task Force Chair, Ms. Janie Hopkins (TWDB), briefly summarized the TWDB cooperative monitoring in the Carrizo-Wilcox and Yegua-Jackson, Sparta-Laredo, and Queen City aquifers. Approximately 626 samples have been collected. The last few will be trickling in this month before sampling stops for the winter. The TWDB will likely continue cooperative monitoring through 2003, specifically in the Trinity and Edwards-Trinity aquifers, with about 350 more samples estimated for each of these aquifers. As a continuation of the Site Selection Task Force Report, Mr. Alan Cherepon (TCEQ) and Dr. Joe Peters (TCEQ) will provide a presentation on the sampling that TCEQ conducted in the Panhandle region as well as plans for monitoring for FY03, under a separate item below.

**Education Task Force:** The Task Force Chair Dr. Bruce Lesikar (TCE), had no activities to report.

**The BMP Task Force:** The Task Force Chair, Dr. Joe Peters (TCEQ), said there was nothing new to address. Mr. Musick said the task force needs to take the outline developed last year and develop it into an education curriculum for the Panhandle region. Using money available from EPA, a contract needs to be developed for TCE to develop this material.

**State Management Plan Task Force:** The Task Force Chair, Dr. Ambrose Charles (TDA), had nothing new to report.

**Data Evaluation and Interpretation Task Force (DEITF):** The Task Force Chair, Dr. Allan Jones (TAES), who was not present, was represented by Dr. Lesikar (TCE). There were no recent activities to report, but a new charge to the task force, with accompanying data/investigation reports for Plainview and Hereford, will be discussed by the subcommittee as a separate business item.

### **III. Business Items for Discussion and Possible Action**

#### **A. Plainview and Hereford Data/Report Referrals to DEITF**

Mr. Cherepon (TCEQ) provided a brief summary and presentation of a charge and draft reports proposed to the DEITF. The problem to be evaluated is the probable source of atrazine detected in specific wells in the Plainview and Hereford PWS systems. The purpose is to provide enough information to allow the Subcommittee to vote on whether to refer these two sites to the DEITF. Atrazine was initially discovered in both systems in 1999. Since then, several years of monitoring and investigation have been completed. All the atrazine detections have been below the 3.0 ppb Maximum Contaminant Level (MCL); therefore, all recommended action will be voluntary.

Well 16 of the Plainview PWS system has consistently tested relatively high for atrazine. During the investigation, wells in the vicinity of well 16 were sampled including monitoring wells at the adjacent Hale County Airport. All the monitoring wells at the airport had atrazine detections using immunoassay analysis. These detections were confirmed by lab analyses from three different labs (LCRA, Syngenta, and USGS). Interviews of individuals knowledgeable in pesticide application activities in the area included two individuals with knowledge of an alleged atrazine-related spill at the Hale County Airport. This is to have occurred around 1975, at the Miller Flying Service (north) side of the airport. The following evidence indicates that the airport site is the most likely source of the contamination: (1) the pattern of isoconcentration maps for both atrazine and metolachlor (plotted from immunoassay analytical results), (2) the location of PWS well 16 in relation to the alleged spill area and the direction of surface drainage, and (3) the lack of appreciable detects in other nearby wells. The only other reasonable origin, based on available information, is from past mixing, loading, and equipment rinsing operations at the airport. Both possible origins would be classified as point sources.

The Hereford PWS atrazine impact consists of three areas: a former aerial applicator airfield, a former spill area along Tierra Blanca Creek, and a third area upstream (west) and near well 19 and the creek. For the first area, the former aerial applicator facility is the most likely source of atrazine; since the nearest well has the highest atrazine concentrations of all the wells in the PWS. The wells in this area have adjacent cropland that is also a potential source of contamination (PSOC). The most likely source of contamination for the second area is a 1985 atrazine spill at a grain elevator facility. All the wells downstream and near the creek have had atrazine detects. The third area is upstream from this spill, but is in a low-lying area near the creek. One possibility is that, when the atrazine spill occurred downstream of well 19, the creek could have backed up water during a storm event. This could have carried some of the atrazine upstream into this area. This area is only five to ten feet higher than where the spill occurred. Another possible source of contamination for this area is the runoff from croplands further upstream of well 19.

In a follow up question after the presentation, Ms. Hopkins asked why three labs were used for analyzing samples. Mr. Cherepon responded that the initial samples obtained at the Hale County Airport had some petroleum hydrocarbons present from a former leaking underground storage tank

at the airport. There was a concern of whether the hydrocarbons would interfere with atrazine analysis, and Syngenta was asked if they could conduct some limited analysis to determine this. The sample results indicated no obvious interference. TCEQ also wanted to get an idea of what compounds the immunoassay analyses were detecting as atrazine and metolachlor. There can be a significant response to the presence of metabolites/degradates. Also, since some samples analyzed at the LCRA lab had experienced matrix interference, a comparison of labs and methods might help determine how the matrix interference was affecting the atrazine and metolachlor results. Since the TWDB had some additional analytical funds available for additional lab work, we felt that the money would be well spent in trying to clarify these issues.

Mr. Musick summarized that analytical results have been received, the investigations are completed and the results have been documented. With the investigation completed, the Agricultural Chemicals Subcommittee needs to decide whether to forward the available information and data to the DEITF for review. The ACS unanimously voted to forward these reports to the DEITF.

## **B. Summary of FY02 Monitoring Activities and Proposed FY03 Monitoring Plan**

Dr. Peters (TCEQ) provided a handout and summary of groundwater monitoring accomplishments relative to the ACS FY02 Monitoring Plan. Items of primary importance in the FY02 plan were completed. Those not completed include monitoring of Lubbock and Kress PWS systems (the last two systems listed in Item II), follow-up monitoring in Item IV, all but one of the PWS systems in Item V, and re-sampling of several IPD detect wells in Item VI.

- The cooperative monitoring of Carrizo-Wilcox, etc., 384 wells samples, 59 QA/QC samples in a 45 county area, 2 atrazine detects < 0.1 ppb, and 3 metolachlor detects < 0.3 ppb.
- The Panhandle samples, 120 PWS wells and monitoring wells sampled, 7 Points-of-Entry sampled, 4 surface water samples, 17 cooperative well samples taken by North Plains Groundwater Conservation District, 17 QA/QC samples for a total of 165 analyses. Five atrazine detects from the NPGCD samples with the highest 0.58 ppb.
- Verification monitoring of 2 wells in Knox and Haskell Counties, 3 wells sampled, only detect of atrazine in Haskell County well, at 0.1 ppb by immunoassay analysis.
- Total of 504 wells sampled, 76 QA/QC samples, 11 non-well samples for a total of 594 samples analyzed for atrazine and metolachlor by immunoassay. 8 metolachlor samples exceeded holding times, several samples lost due to freezing and breaking in the NPGCD refrigerator.

Someone asked when was the last time the wells in Knox and Haskell Counties were sampled. Mr. Cherepon answered it was about 1990-1991, by TDA.

Mr. Cherepon provided handouts of the proposed FY03 Monitoring Options for pesticides in groundwater. This monitoring plan had been previously discussed at a Site Selection Task Force meeting on Monday October 21, 2002. This plan was similar to the previous year's, with cooperative monitoring as the top priority. This was followed by plans to investigate several PWS

systems with atrazine detects. Ongoing monitoring in PWS systems that already have been investigated was next on the list, followed by confirmation monitoring, in the Panhandle, of wells previously sampled by the TWDB in the first year of cooperative monitoring (wells with atrazine detects > 0.3 ppb). Item V included planned confirmation monitoring of PWS systems with new atrazine detects. The final item is the planned confirmation monitoring of older atrazine detects from the Interagency Pesticide Database (IPD).

Mr. Cherepon followed with a brief summary of several items discussed during the SSTF meeting which was held the previous Monday to discuss the monitoring plan. Budget cuts to the FIFRA grant may result in a reduction of field activities by TCEQ during the FY03. Mr. Barry Miller (TAGD) made a suggestion, that we should ask the other groundwater districts to assist with resampling some of the wells with older detects and detects > 0.3 ppb atrazine from the cooperative monitoring. Ms. Donna Long (TSSWCB) also identified potential additional funds in the 319 program that we might be able to tap into toward the end of the year, since the pesticide monitoring work relates to this program. She said that 319 monitoring funds in urban areas would need to come from the TCEQ, while those in rural/ag areas would need to come from the TSSWCB. The ACS would need to draw up proposals for requesting these funds, should they decide to proceed.

Some discussion and questions followed. Mr. Musick asked whether detections of other pesticides in Texas' groundwater were discussed at the SSTF meeting. Mr. Cherepon responded that neither he nor the SSTF have addressed this work in relation to the FY03 monitoring options. The USGS NAWQA work typically is detecting pesticides in the parts per trillion range, generally low, often below detection for EPA analytical methods. Mr. Musick also asked that since we have less money for monitoring, does the ACS want to continue spending money on investigating previous detects in PWS systems or older detects in the IPD, and rearranging priorities in the monitoring options. The point of getting additional cooperation from other groundwater districts and the 319 program monies was reiterated as a means to stretch monitoring efforts with less FIFRA funds. Mr. Musick asked if the PWS systems in Items II and III were listed in order of priority, with the response by Mr. Cherepon that they were not. Those in Item II were mostly low concentrations, except for 1 in Lubbock, 2 in Amarillo, and 2 non-PWS system detects north of Amarillo. Concentrations were above 0.3 ppb but below 1 ppb. Another question was whether 22 wells remained to be resampled in the Panhandle cooperative monitoring effort. The answer was that only 5 remain to be resampled out of the original 22 detects above 0.3 ppb. A follow-up question inquired as to whether the resampling would provide any additional insight into detects clustered in the central Panhandle. Mr. Cherepon said that the remaining 5 wells were mostly north of this area, and would not. TCEQ will ask the NPGCD whether they could resample these wells in their district.

The newer atrazine detects in Item V of the plan are very low concentrations. Two other pesticides have also been identified, including bromacil and prometon in PWS systems. The USGS monitoring reports have yet to be addressed in the monitoring options, and could include prometon and diazinon. Some discussion followed on specific pesticides. Ed Baker (Syngenta) clarified that Pramitol is Syngenta's trade name for prometon, a herbicide that is also used for weed control around PWS wells. Caparol is the trade name for prometryn.

Mr. Musick went through the monitoring options to see what the subcommittee could agree on, and what changes were needed. The options were as follows.

- No one had a problem with continuation of cooperative monitoring, although the metolachlor analyses would be drastically reduced due to budget cuts.
- Try to reduce ongoing monitoring at previously investigated PWS systems to once a year.
- See if the TCEQ Public Drinking Water Section's sampling contractor (Texas Rural Water Association) can collect these samples when they are there collecting the annual POE samples at each system identified for this purpose, and if not, see if the groundwater conservation districts in those areas could possibly do so.

Two items came up for discussion. The ACS should prevent duplication of effort wherever possible through cooperation and coordination of sampling efforts. Also, should 319 money be available, this could possibly be distributed, at least in part, to groundwater conservation districts conducting the annual resampling of PWS wells and other confirmation monitoring efforts.

Item V includes some areas with atrazine detects outside of the Panhandle, and Mr. Musick asked whether the ACS thought it might be time to look at these areas, rather than only concentrating on the Panhandle year after year. Williamson County has some corn and sorghum cropland, numerous shallow wells, and one of the atrazine detections. Since this is nearer to TCEQ's office, it might be prudent to investigate this site further. He suggested the subcommittee move Item V up to Item III in terms of priority, and move everything else one place down. The subcommittee agreed. The subcommittee also agreed that the first three items in the plan should at least be accomplished this fiscal year. With these changes the amended FY03 monitoring plan was approved by the subcommittee.

### **C. Legislative Recommendations Report to 78<sup>th</sup> Legislature**

The Legislature report item was placed here on the agenda as a reminder for the subcommittee to revisit whether any new items or recommendations were needed for this. There were no comments or additional recommendations for the TGPC legislative report.

### **D. IPD Update & Discussion**

Dr. Peters provided a handout and brief update summary of Interagency Pesticide Database (IPD) activities in FY02 and outlined what work needs to be done in the near future. What has been accomplished is some review and clean-up, consisting mostly of separating sample and well data unrelated to pesticides (ie. arsenic) and identifying some missing state well numbers, latitudes and longitudes. Anticipated work for FY03 includes inputting more recent data from the past year or two and identifying additional data sources. This will include the spring sampling data that the TSPCB has been doing (2 rounds completed, 1-2 more scheduled), as well as possible Superfund-related groundwater monitoring data which includes pesticide analyses. With the FIFRA grant budget cuts impacting monitoring/field activities, the 2003 fiscal year would be a good year to focus more efforts

on the IPD, including data entry, mapping, and the study/assessment of existing data and trends.

Ms. Lynne Fahlquist (USGS) said that the projects her agency has been working on have already been mentioned; the High Plains/Southern Plains NAWQA and SWAP being the main ones. The USGS is also doing work in the Coastal aquifers, mostly in the Trinity River Basin/Houston area in the Chicot aquifer. This includes the scheduling for monitoring of 15 PWS wells in an urban setting. Mr. Peter Van Metre is also sampling and studying sediments above the water table.

#### **IV . Public Comments**

There were no public comments made at this meeting.

#### **X. Announcements**

Steve Musick briefly reported on the USEPA Region 6 FIFRA semi-annual meeting, held in Dallas the previous week. The PMP Final Rule was brought up, with EPA reportedly considering only a PMP process rule with specific chemicals identified later through registration reviews. EPA is considering including surface water in the revised rule. Also, Bo Spoons (TDA) has been named the new Region 6 SFIREG representative, which is holding its meeting this week in the Washington D.C. area.

Ms. Debbie Danford (TDA) made several announcements for TDA.

- On 11/21/02, the Invasive Riparian Task Force will be meeting at the Capitol Extension.
- On 12/09-10/02, SFIREG will meet in the Washington D.C. area.
- On 12/3-4/02, the Texas Plant Protection Conference will be held in College Station.
- Dr. Ambrose Charles (TDA) added that TDA is in the process of moving within their building, but that phone numbers will hopefully not change.

Ms. Hopkins announced that the TWDB has a new website to access groundwater monitoring data, maps, and other related information related to what her team is doing in groundwater monitoring. This is a different site than the recent WIID site, which also contains numerous useful links to water information.

Mr. Cherepon announced that the Gulf Coast Association of Geological Societies is holding their annual convention this week at the Austin Convention Center. The convention will include sections on water and environmental issues.

The decision was made by the Texas Groundwater Protection Committee during their 10/28/02 meeting that the FY03 second quarter meeting of the Texas Groundwater Protection Committee will be on January 23, 2003, at 1PM, in TCEQ Bldg. F Conference Room 2210. The Agricultural Chemicals Subcommittee will take place on the same day at 10AM, in the same location and room.

## **VI. Adjournment**

Recorded and transcribed by Alan Cherepon.

### **Attachments**

Plainview & Hereford Charges and Draft Reports to DEITF

FY02 monitoring Summary

FY03 Proposed Monitoring Plan

IPD Update to ACS (subcommittee only)

## **ATTACHMENTS**